Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	MM Docket No. 00-39
Review of the Commission's)	
Rules and Policies Affecting the)	
Conversion to Digital Television)	

To: The Commission

MSTV/NAB/ALTV PETITION FOR RECONSIDERATION

SUMMARY

The Commission's *DTV Biennial Review Order* took certain positive steps that will advance the transition – notably, establishing procedures to resolve mutually exclusive maximization applications. The *Order* included other decisions, however, that disproportionately and unfairly burden broadcasters without advancing the goals of a speedy and effective digital roll-out. For example, it imposes premature deadlines for replication and channel election that ignore the realities facing broadcasters attempting to successfully initiate and develop their digital service. It also establishes a heightened principal community coverage requirement which, though less aggressive than the earlier proposal, could create undue hardships for stations in difficult operating or topographic conditions unless accompanied by a reasonable waiver policy. The *Order* also declines once again to establish minimum performance thresholds for DTV receivers – standards necessary to protect consumers and provide a realistic opportunity for the public to experience DTV services.

MSTV, NAB, and ALTV believe that the Commission can take an important step toward advancing the digital transition by reconsidering its decision in this proceeding. It should impose minimum performance thresholds on DTV receiver manufacturers if they do not promptly adopt appropriate voluntary standards and should establish a reasonable waiver policy for its new principal city coverage requirement. In other areas, the Commission should remove requirements that will hinder rather than advance the successful introduction and ultimate acceptance of DTV. In particular, it should rescind its "use-it-or-lose-it" deadline for full replication, and instead allow stations a reasonable period of time to "ramp up" to fully replicated or maximized DTV facilities. Far from hindering the transition, such an approach would foster the early introduction of DTV service to core service areas, while preserving the opportunity for stations to grow into their full DTV facilities – in both instances fostering DTV service to the public. Finally, the channel election date selected by the Commission will require broadcasters to select an ultimate DTV channel before they have sufficient experience with digital transmission to make educated choices about which of their two channels will provide optimal digital service. The Commission should reconsider its decision to impose a channel election deadline at this time.

Several of the issues decided by the Commission in its *DTV Biennial Review Order* – the "use-it-or-lose-it" replication deadline and the channel election deadline – do not have to be resolved right away. The impulse of the Commission to decide these issues now, virtually in the abstract, when only 26,000 DTV sets are in American homes, contrasts sharply with the Commission's hands-off approach to issues involving other industries that must be solved if the transition is to move forward. The Commission should decide these broadcast issues in the context of a more coherent and holistic approach to the DTV conversion that reflects market realities and involves *all* of the industries critical to the ultimate success of DTV.

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The Association for Maximum Service Television, Inc. ("MSTV"), the National Association of Broadcasters ("NAB"), and the Association of Local Television Stations, Inc. ("ALTV")¹ petition for reconsideration of certain aspects of the 2000 *DTV Biennial Review Order*.² In this proceeding, the Commission has made a number of helpful decisions and steered away from or revised certain proposals that would have harmed the public's stake in an effective digital transition. On the other hand, it has made decisions about replication, DTV receiver thresholds, and channel election that will further slow or stymie the transition unless substantially adjusted on reconsideration. Additionally, it has imposed a principal community

¹ MSTV represents nearly 400 local television stations on technical issues relating to analog and digital television services. NAB serves and represents the American broadcast industry as a nonprofit incorporated association of radio and television stations and broadcast networks. ALTV is a nonprofit trade association representing local television broadcasters across this county. All petitioners were participants in the Joint Broadcasters' comments filed in this proceeding; NAB and ALTV also separately filed comments; MSTV and NAB separately filed reply comments; and all Petitioners have filed *ex parte* comments.

² Report and Order and Further Notice of Proposed Rulemaking, *In re Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MM Docket No. 00-39, FCC 01-24 (rel. Jan. 19, 2001) ("*DTV Biennial Review Order*").

coverage requirement that, if rigidly applied, may impose hardships on certain broadcasters.

These decisions both exacerbate and are exacerbated by the Commission's decisions in the *DTV*Cable Carriage Proceeding, which threaten to substantially slow or derail the DTV transition.

Both the Congressional Budget Office⁴ and the Commission⁵ have emphasized that a successful digital transition requires a multi-pronged approach involving the cable industry, receiver manufacturers, content providers and others – in other words, broadcasters cannot accomplish the DTV transition on their own. Nonetheless, in this proceeding, the Commission once again imposes aggressive requirements on broadcasters, while failing to address the larger context in which the transition must progress. While the Commission should address certain issues immediately – such as resolving conflicting DTV applications, establishing receiver performance thresholds, and adopting a waiver policy for the new principal community coverage requirement – other issues should be evaluated in the context of an overall action plan for managing the digital transition. Specifically, issues pertaining to DTV replication

³ See First Report and Order and Further Notice of Proposed Rulemaking, In re Carriage of Digital Television Broadcast Signals, Amendments to Part 76 of the Commission's Rules, CS Docket No. 98-120, Implementation of the Satellite Home Viewer Act of 1999: Local Broadcast Signal Carriage Issues, CS Docket No. 00-96, Application of Network Non-Duplication, Syndicated Exclusivity and Sports Blackout Rules to Satellite Retransmission of Broadcast Signals, CS Docket No. 00-2, FCC 01-22 (rel. Jan. 23, 2001) ("DTV Cable Carriage Order").

⁴ See Congressional Budget Office, Completing the Transition to Digital Television, at 19 (Sept. 1999).

⁵ See, e.g., Notice of Proposed Rulemaking, CS Docket No. 98-120, 13 FCC Rcd 15092, 15101 (1998) (cable industry participation is essential to a successful transition). Additionally, the Commission's Chief of the Office of Engineering and Technology, Dale Hatfield, has recognized that a successful transition depends on many elements including "broadcast television stations, cable television systems, direct broadcast satellite services, the DTV transmission standard, programming (including pre-recorded media such as videocassettes and DVD discs), and television receiving and recording equipment." Letter to The Honorable W.J. "Billy" Tauzin, Chairman, House Subcommittee on Telecommunications, U.S. House of Representatives, from Dale N. Hatfield, Chief, Office of Engineering and Technology, Federal Communications Commission, at 1 (Sept. 1, 2000).

requirements and channel election should be merged with a broader strategy; at the very least, action on these fronts should be suspended until the Commission adopts such a strategy.

Many of the Commission's decisions with respect to the digital roll-out have been driven by the 2006 target Congress set for the analog channel give-back. Initially, the Commission – in the exercise of its expertise and after studying the introduction rate of other new technologies – concluded that the DTV transition should take 15 years from the later of the adoption of the DTV standard or the Table of Allotments.⁶ For budgetary reasons exclusively, however, Congress established a far more aggressive deadline.⁷ Accordingly, the Commission focused on DTV build-out requirements and other deadlines for broadcasters in order to implement this expedited timetable, ⁸ though few or no steps were taken on the other fronts essential to an accelerated transition: cable carriage, ⁹ cable compatibility, ¹⁰ and receiver

(continued...)

⁶ See Memorandum Opinion and Order/Third Report and Order/Third Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 7 FCC Rcd 6924, 6964 (1992); Second Report and Order/Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 7 FCC Rcd 3340, 3353-54 (1992).

⁷ See 47 U.S.C. § 309(j)(14)(A). Seemingly aware that its deadline was unreasonable, Congress provided for extensions of the give-back date if certain milestones were not met. See 47 U.S.C. § 309(j)(14)(B). The passage of time has made clear that other elements of the transition have not fallen into place so that now the milestones likely will not be met or even approached by 2006.

⁸ See DTV Biennial Review Order, ¶ 24. The Commission's "three-stage approach to the transition to DTV" is based entirely on deadlines for broadcasters.

⁹ See DTV Cable Carriage Order, ¶ 12 (refusing to grant television stations digital must-carry rights during the transition).

¹⁰ See, e.g., Ken Freed, CES Aside, Where's Integrated TV?, Broadband Week (Jan. 20, 2001) (describing slow development of digital set-top boxes and integrated DTV sets).

[&]quot;The situation at the moment is pretty stagnant," says Strategist Group broadband analyst Keith Kennebeck. "The OpenCable push into set-top boxes hasn't yet come to fruition with actual boxes in the retail market, and that needs to happen before there is any substantial effort by cable's 'old boys network' to push OpenCable into cable-ready TV sets."

performance and availability.¹¹ Consequently, there is no synchronization between the rushed pace of regulating broadcasters' role in the transition and the almost complete absence of progress by other essential industries. The sluggish pace of the DTV transition has been noted by Chairman Powell, who has concluded "the current time frame [is] extraordinarily unlikely to be achieved."¹²

The reconsideration stage of this proceeding offers a modest opportunity to ameliorate some of the roadblocks of the transition (though many of the most fatal problems lie within the *DTV Cable Carriage Proceeding*) and to link the requirements imposed on broadcasters to other transition issues which, while outside the scope of this proceeding, are critical to the ultimate success of the DTV conversion.

I. THE COMMISSION'S "USE-IT-OR-LOSE-IT" DEADLINE IS PREMATURE AND SHOULD BE RESCINDED.

In the *DTV Biennial Review Order*, the Commission stated that it would not require replication because it wants "to give broadcasters a measure of flexibility as they build their DTV facilities to collocate their antennas at common sites, thus minimizing potential local difficulties locating towers and eliminating the cost of building new towers." The Commission also observed that it would be inefficient to require licensees not operating on their core channels

Id

¹¹ See DTV Biennial Review Order, ¶¶ 96, 107-110 (to date failing to impose DTV tuner standards or to require that television sets include DTV tuners).

¹² Bill McConnell, *Broadcasters Ready for Battle to Postpone 2002 Transition*, Broadcasting & Cable (Jan. 29, 2001) (quoting Chairman Powell: "I'm no fan of these expectations about the time frame in which this transition is going to occur."); *see FCC Comrs. Differ Over Merger Authority, DTV Transition*, Communications Daily, 6 (Dec. 1, 2000) (quoting then-Commissioner Powell: "This transition is never going to be on track and never was.").

¹³ See DTV Biennial Review Order, \P 21.

to construct full replication facilities on channels that they soon will vacate.¹⁴ But despite these persuasive reasons for not requiring replication, the Commission adopted a December 31, 2004 "use-it-or-lose-it" deadline for replication.¹⁵ Because it would penalize broadcasters for taking a measured approach to the transition based on marketplace realities over which they have little control, the new requirement would be unrealistic, unfair, and counterproductive.

Far from being the "incentive" the Commission envisions, the use-it-or-lose-it replication deadline could complicate and delay the transition. In the first place, it would deprive broadcasters of flexibility in building out their digital facilities. Second, the replication deadline adds an additional, unwarranted burden that is inconsistent with the Commission's encouraging broadcasters to develop common sites and explore other creative means to accomplish the DTV transition. Third, the requirement will further hamper the initiation and delivery of DTV service to the public by requiring stations to redesign their DTV facilities shortly after they put them into service or, worse, causing stations to delay constructing DTV facilities because of the need to change their plans in light of the new requirement or because the cost of facilities to achieve full replication is too great given the lack of corresponding benefit. Causing stations that already have built out at lower power to redesign and build again will put further pressure on already scarce tower crew resources, hampering other stations' efforts to construct DTV facilities and go on air by 2002. And fourth, requiring replication by December 31, 2004 would serve no useful purpose because without movement from other industries, the DTV transition cannot progress.

Many broadcasters sensibly planned a graduated implementation of digital broadcasting, originally building smaller facilities and then expanding to fully replicated or

¹⁴ *Id*.

¹⁵ *Id.*, ¶ 22.

maximized DTV facilities once DTV receiver penetration levels increase. Such a strategy would advance the goal of an expedited, effective roll-out. But faced with the 2004 use-it-or-lose-it deadline, many of these broadcasters may forego the early initiation of DTV service (with smaller facilities that would soon need to be modified to meet the replication deadline) and simply construct replicated facilities as late as possible consistent with the use-it-or-lose-it deadline. This would mean less early DTV availability to core service areas – the very areas able to jump-start the DTV transition. The deadline may also mean that more stations, faced with impossible lending or other financial constraints, will opt for smaller facilities, leaving rural outlying areas unserved or abdicated to encroaching larger-market stations – neither consequence would serve the goal of localism and the first consequence would contravene the policy goal of universal service. The Commission should return to its earlier decision to protect broadcasters' allotted DTV service areas, affording them a realistic opportunity to grow into their ultimate DTV service. That decision advanced the transition because it encouraged the early launch of DTV service in the near term and broader, wide-area DTV service in the longer term. It harnessed market forces, not stifled them.

Broadcasters face low DTV receiver penetration, cable compatibility problems, technical obstacles, and no assurance that the 70% of their viewers who receive their service over cable will in fact have access to their digital signals. Additionally, potentially mutually exclusive maximization applications and other interference issues have added complexity to the process and will, despite the staff's conscientious efforts, slow processing of the many pending non-checklist applications. Against this backdrop, the Commission's use-it-or-lose-it approach will

¹⁶ In addition, the limited availability of tower and antenna erection crews will surely make it difficult for many stations to meet the construction deadline. But this circumstance is balanced (continued...)

place serious financial hardships and practical burdens on the television broadcast service by effectively requiring fully built out DTV operations, despite the fact that, as attested to by the Commission itself, few DTV viewers will be able to enjoy the signals. Broadcasters in smaller markets – those with the fewest resources to build out DTV facilities and replicate their often geographically large service areas – will be disproportionately hurt. When they cannot fully replicate by December 31, 2004, larger, better-funded neighbors (and possibly Class A stations) will encroach on their allotted DTV service areas.

To avoid these harms, broadcasters should continue to have flexibility beyond December 31, 2004. The Commission should encourage broadcasters to launch DTV services early, even if at first using smaller facilities. It is unlikely that by the end of 2004 the complete interference characteristics of DTV service and the impact of seasonal variations will be fully understood and evaluated in the field. Broadcasters should have a longer, more reasonable time to experiment with different coverage patterns to optimize the availability of DTV service without prematurely losing the opportunity to grow into the DTV service areas that replicate their existing analog service.

For the same reasons, the Commission should take this opportunity to establish that protection for *maximized* facilities will be preserved past construction permit deadlines to a date that allows broadcasters to effect graduated build-out plans for those facilities. The public should not be deprived of the ultimately wider DTV service areas afforded by maximized facilities simply because the Commission establishes too-early maximization deadlines. Just as broadcasters need time to increase facilities to full replication, they need time to fully maximize.

by the fact that the percentage of American households that can receive over-the-air digital signals is approaching 70%.

The Community Broadcasters Protection Act of 1999 ("CBPA") required stations to file their maximization applications by May 1, 2000 in order to speed licensing of Class A stations, which are prohibited from interfering with DTV maximization. Once that window closed, establishing the universe of maximized DTV facilities subject to protection, the statutory purpose was served. Congress made clear its intent to protect the ability of DTV stations to replicate and maximize service areas. The Commission should ensure that this statutory purpose is secured by maintaining protection for both replicated and maximized service areas until increased build-out makes sense in light of a coordinated transition approach involving all industries. The Commission should preserve the opportunity for a rational build-out that ultimately will afford better service to the public by both rescinding its 2004 use-it-or-lose-it deadline and affirming that maximized service areas will be protected until the transition has progressed much further on all fronts.

II. THE COMMISSION SHOULD ADOPT A REASONABLE WAIVER POLICY TO MITIGATE PARTICULAR PROBLEMS ENCOUNTERED WITH ITS NEW PRINCIPAL COMMUNITY COVERAGE REQUIREMENT.

The Commission has required broadcasters to cover their principal communities with a signal that is stronger than the DTV service contour requirement previously adopted.¹⁹ Like the "use-it-or-lose-it" replication deadline, the Commission's new principal community coverage requirement may reduce broadcaster flexibility that is particularly needed in certain circumstances. Accordingly, the Commission should administer the new rule in accordance with a reasonable waiver policy.

¹⁷ See 47 U.S.C. § 336(f)(1)(D).

¹⁸ See Report and Order, In re Establishment of a Class A Television Service, MM Docket No. 00-10, 15 FCC Red 6355, 6377 (2000).

 $^{^{19}}$ See DTV Biennial Review Order, ¶ 27.

The Commission's decision assumed without support that its requirement "will not force many licensees to increase their power or move their antenna resulting in increased cost." However, the decision lacks information about the scope of the costs its new requirement will engender. Those costs could, in fact, be great. Increasing power results in immediate transmitter costs and increased long-term operating costs, while moving an antenna – possibly an infeasible solution altogether – would require enormous permitting, engineering, and reconstruction costs.

Additionally, the "one-size-fits-all" increase of 7 dB ignores the variety of special topographic and operating conditions that broadcasters may face to reach their audiences. For example, a broadcaster in a large but sparsely populated, hyphenated market may wish to site a tower that would cover a greater number of viewers but that could not provide the newly required signal strength over the principal community. The broadcaster would, however, provide a signal that is perfectly effective for digital service in that community, keeping in mind that a digital viewer either receives service or does not. Unlike analog, there is no gradual degradation of service. Thus, the Commission's new requirement could result in a broadcast signal that would reach fewer viewers and to no real end. Finally, in reliance upon Commission encouragement and in the face of numerous zoning or other difficulties, broadcasters in some instances have sited DTV antennas in locations that would provide adequate coverage of their principal communities but that may not allow them to achieve the new signal strength levels.

 $^{^{20}}$ Id., ¶ 30.

Accordingly, the Commission should adopt a waiver policy in cases where terrain, antenna siting constraints, or other circumstances make it impractical, impossible, or undesirable for a station to meet the new principal community coverage requirement.

III. THE COMMISSION SHOULD ESTABLISH DTV RECEIVER PERFORMANCE THRESHOLDS.

In the *DTV Biennial Review Order*, the Commission again missed an opportunity to promote the DTV transition when it chose not to set DTV receiver performance thresholds.²¹ Despite overwhelming evidence that performance thresholds are necessary to ensure consumers adequately functioning DTV sets, the Commission continues to risk consumer dissatisfaction and low DTV set penetration – conditions that threaten the ultimate success of the transition.

Petitioners urge the Commission to quickly adopt specific DTV receiver performance thresholds. Formal Commission adoption of these thresholds might not be necessary, however, if receiver manufacturers adopt them voluntarily.

A. The Commission Should Adopt Specific Receiver Performance Thresholds.

For the past six years, broadcasters have repeatedly asked the Commission to establish receiver performance thresholds to ensure that new DTV receiver purchasers are not disappointed in the reception quality of their new sets and that these sets perform to the level that the Commission intended to achieve in developing the DTV Table of Allotments.²² Specifically,

²¹ See DTV Biennial Review Order, ¶ 96.

²² See Petition for Clarification and Partial Reconsideration of the Fifth and Sixth Reports and Orders, Association for Maximum Service Television, Inc., the Broadcaster Caucus, and Other Broadcasters, MM Docket No. 87-268, at 43-45 (June 13, 1997); see also, e.g., Broadcasters' Comments on the Fourth Notice of Proposed Rulemaking, MM Docket No. 87-268 at 36-38 (Nov. 20, 1995); Broadcasters' Reply Comments on the Fourth Notice of Proposed Rulemaking, MM Docket No. 87-268 (Jan 22, 1996); Joint Broadcasters Comments, MM Docket No. 87-268, at 32-34 (July 11, 1996); Joint Broadcasters Comments, MM Docket No. 00-39, at 22-24 (May 17, 2000); MSTV Reply Comments, MM Docket No. 00-39 at 10-11 (June 16, 2000).

broadcasters have asked the Commission to adopt the same minimum levels of performance for receivers with respect to receiver noise figures, carrier-to-noise ratios, and co-channel/adjacent channel/taboo channel D/U ratios that were assumed when creating the coverage and interference figures in the DTV Table of Allotments.²³ While these thresholds ensure a minimum level of receiver quality, they are quite limited and do not dictate to manufacturers how they are to be met. Unless receivers have at least the performance levels used in the Commission's planning factors, the Commission's coverage and interference predictions will not accurately reflect the service available to American viewers.

Adopting minimum performance levels for DTV receivers would go a long way toward improving the quality of DTV reception for consumers and we again urge the Commission to reconsider its decision. Broadcasters understand the Commission's reluctance in this area and agree with the Commission's statement that the performance levels specified in the DTV Table are not entirely sufficient to insure reliable reception in areas of strong dynamic multipath and other challenging RF environments. However, we believe that adopting these thresholds is the first, necessary step in remedying many of the performance shortfalls experienced by DTV viewers. We also believe that multipath immunity thresholds are necessary

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²³ See Sixth Report and Order, MM Docket No. 87-268, Appendix A 12 FCC Rcd 14588, 14690 (1997) (attached to this Petition). The DTV Table assumes that DTV receivers meet the following performance levels: noise figures (N_B) of 10 dB for low VHF, 10 dB for high VHF, and 7 dB for UHF; a carrier-to-noise ratio of +15.19 dB; a DTV-into-DTV co-channel desired-to-undesired (D/U) signal ratio of +15.27 dB; a lower DTV-into-DTV adjacent channel D/U signal ratio of -41.98 dB, and an upper DTV-into-DTV adjacent channel D/U signal ratio of -43.17 dB; and DTV-into-DTV taboo channel D/U signal ratios specified in the DTV Sixth Report & Order's Appendix A.II, attached. These performance levels are far from being newly minted inventions. Receiver manufacturers should have been using them as a baseline target for the past three or four years.

and the Commission should commit to establishing them, but further testing is needed to develop those thresholds. The Petitioners are working to develop multipath immunity thresholds and will provide them to the Commission once they are completed. Nevertheless, the Commission should not wait for these results before adopting baseline performance requirements, unless receiver manufacturers adopt such requirements voluntarily.

B. Continued Delay Is Unjustified.

The Commission cited three reasons for refusing to set performance thresholds for DTV receivers. One reason it cites is that market forces are driving set manufacturers to achieve adequate performance levels in their sets.²⁴ But the broadcast industry has just completed a massive, in-depth study of 8-VSB performance that includes data that contradicts this conclusion. That study, which has been submitted to the Commission, concluded that while receiver improvements are being made, progress is slow and inadequate.²⁵

A second reason cited by the Commission for not adopting performance thresholds is a concern that such thresholds would become a "ceiling" rather than a "floor" for receiver performance.²⁶ But the Commission provides no support for this assumption, and evidence to the contrary is readily available. For example, after the Commission imposed UHF noise figure thresholds in 1962,²⁷ performance continued to improve substantially beyond those

²⁴ See DTV Biennial Review Order, ¶ 96.

²⁵ See VSB/COFDM Project, Investigation of VSB Improvements, at 2 (Dec. 2000) (Progress continues to be made in improving 8-VSB reception performance.... The few next-generation receivers that have been available for testing to date have shown advances over their predecessors. However, the pace at which improved consumer products are reaching the marketplace is disappointing.).

²⁶ See DTV Biennial Review Order, ¶ 96.

²⁷ See First Report and Order, All Channel Television Receiver Rules (All Channel Act), Docket No. 14760, 27 Fed. Reg. 11698 (Nov. 28, 1962).

requirements.²⁸ The presence of DTV receiver performance thresholds would not diminish equipment manufacturers' incentives to make improvements in response to the market. Rather, they simply would ensure a minimum level of DTV set performance for consumers, inspiring confidence and encouraging investment in DTV.

The third reason the Commission gave for declining to impose performance thresholds was that it appeared too early to formulate specific proposals.²⁹ But the Commission provided no support for this contention. Moreover, the proposed DTV receiver performance thresholds are specific, and Petitioners are willing to work further with the Commission and receiver manufacturers on any fine-tuning or further development (*e.g.*, for multipath) that may be necessary.

By adopting performance thresholds, the Commission would serve important principles of consumer protection. To be marketed as television receivers, usable by consumers who may move from place to place, digital television sets should be subject to certain performance minimums. The establishment of such standards is a very modest step and well within the Commission's power.³⁰

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²⁸ See Report and Order, Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act, Part 73 Definition and Measurement of Signals of Grade B Intensity, 14 FCC Rcd. 2654, 2674 (1999) (finding that receiver noise figures have greatly improved over the past 40 years). Automobiles provide another example. They are subject to certain minimum safety requirements, but manufacturers compete in efforts to exceed these minimums and promote their achievements to consumers.

²⁹ See DTV Biennial Review Order, ¶ 96.

³⁰ The equipment manufacturers' argument that the All Channel Receiver Act ("ACRA") does not provide sufficient authority for the Commission to adopt performance thresholds has been sufficiently rebutted. *See, e.g., DTV Biennial Review Order*, ¶ 105. The language of ACRA is not limited to UHF, *see* 47 U.S.C. § 303(s), and simply because Congress did not know of digital broadcasting when it enacted ACRA is insufficient reason to cabin the clear statutory language.

IV. THE COMMISSION'S CHANNEL ELECTION DEADLINE IS PREMATURE.

The Commission decided in this proceeding that commercial stations with two incore channels must elect their final channels for DTV operation by 2003.³¹ The result is to impose on broadcasters – and only broadcasters – a deadline based on an unrealistic transition schedule. The Commission has acknowledged, as has the Congressional Budget Office, that broadcasters alone cannot accomplish the DTV transition. The Commission should also recognize that continued difficulties in obtaining consensus on issues such as cable compatibility have lengthened the transition. Accordingly, stations simply will not have enough time by 2003 to engage in the complex technical evaluation of DTV propagation and reception qualities necessary to make informed decisions about which channels will provide optimal DTV service to the viewing public. By forcing stations to choose final channels without adequate information, the Commission would cause wrong choices to be made, ultimately harming the quality of the public's broadcast service and undermining the goals of the DTV transition. Moreover, since the digital transition cannot move forward without contributions from many industries that so far have been slow to materialize, no legitimate end would be served by requiring broadcasters to choose a final DTV channel years before that choice will be implemented. At the very least, the Commission should rescind the current channel election date and revisit the issue in the next DTV Biennial Review, when further information may be available about the pace of the transition across all fronts.

In requiring commercial broadcasters to elect their final DTV channels by 2003, the Commission, as it did in another context, "seems to have plucked the [deadline] out of thin

³¹ See id., ¶ 14.

air."³² Against all indications, the Commission concludes that "the transition process will be sufficiently along" by the channel election date.³³ Rather than proceed by guesswork, the Commission should tie channel election to an ascertainable and meaningful benchmark. The statutory transition deadline already provides for extensions based on DTV penetration.³⁴ The Commission should take a similar approach with channel election and establish that channel election will not be required until, for example, DTV penetration has achieved a specific level. This is not to say that channel election should be delayed until the 85% DTV penetration benchmark that triggers the analog give-back has been achieved, but simply that the deadline should be related to a clear indication of transition progress. The Commission does not have to and should not choose an arbitrary date unconnected to the realities of the marketplace.

* * *

The Commission should reconsider its decision in this proceeding, but not in isolation from other issues critical to the success of the digital transition. It is this fragmented approach to digital transition issues that has led to the present situation – where broadcasters alone are being required to meet numerous and burdensome requirements, while other industries whose cooperation is essential to the transition face few if any constraints and continue to drag their feet. Therefore, we urge the Commission expeditiously to proceed with its arrangements for processing mutually exclusive applications, to adopt receiver performance thresholds if the receiver industry does not do so voluntarily, and to adopt a policy of waiving the principal

³² Time Warner Entertainment Co., L.P. v. FCC, Nos. 94-1035, 95-1337, 99-1503, 99-1504, 99-1522, 99-1541, 99-1542, and 00-1086, 2001 WL 201978, at *11 (D.C. Cir. March 2, 2001) (finding FCC wholly failed to justify vertical limit on cable/programming ownership).

³³ DTV Biennial Review Order, ¶ 14.

³⁴ See 47 U.S.C. § 309(j)(14)(B).

community coverage requirement where necessary or appropriate because of topography, antenna siting constraints, or other circumstances. With respect to replication requirements, channel election and the other issues that relate to later stages of the transition, the Commission should not proceed until it has developed a more unified and realistic DTV transition strategy, taking into account the valuable real-world experience that will emerge over time. Accordingly, the Commission should (1) rescind its premature replication deadline to allow broadcasters a realistic opportunity to grow into their replicated or maximized digital service areas and (2) rescind its premature channel election deadline, tying any new deadline to the actual progress of the transition (for example, to DTV set penetration).

Respectfully submitted,

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APPENDIX A TECHNICAL DATA

I. System Independent Planning Factors Recommended by the Advisory Committee

Planning Factor	Low VHF	High VHF	<u>UHF</u>
Geometric mean frequency (MHz)	69	194	615
Dipole factor (dBm-dBu) dB (K _d)	-111.8	-120.8	-130.8
Thermal noise (dBm) (N _t)	-106.2	-106.2	-106.2
Antenna Gain (dB) (G)	4	6	10
Downlead line loss for 50 ft. (15 m.) of coax (dB) (L)	1	2	4
Front-to-back ratio (dB) (ratio of forward gain to maximum response over rear 180°	10°	12*	14°
Receiver noise figure (dB) (N _R)	10	10	7
Time probability factor for 90% availability (dB) (dT)	••	••	**
Location probability for (dL) 50% availability (dB)	0	0	0

For the receiving antenna manufacturer's objectives the values are 14, 16, and 20.

See "Fifth Interim Report of the Planning Subcommittee of the FCC Advisory Committee on Advanced Television Service," March, 1992

The time probability factor is defined as the difference F(50,10) minus F(50,50), where these two values are determined from the FCC charts in Section 73.699. This factor is a function of the distance between the transmitting and receiving antennas.

II. ATSC DTV System Performance Capabilities

See "Final Technical Report," prepared by the Technical Subgroup of the FCC Advisory Committee on Advanced Television Service, October 30, 1995. The values tabulated are the results of tests of the Grand Alliance system, except those marked with an asterisk. Estimates marked with "*" were made for the purpose of evaluating service and interference. Measurement data for these factors were not taken for the Grand Alliance DTV system. These estimates are based on measurements of the four DTV systems that preceded the Grand Alliance system.

Parameter	Measured Value (dB)
Carrier-to-Noise Ratio	+15.19
Co-channel D/U Ratio	
DTV-into-NTSC	+34.44
NTSC-into-DTV	+1.81
DTV-into-DTV	+15.27
Adjacent D/U Ratio	
Lower DTV-into-NTSC	-17.43
Upper DTV-into-NTSC	-11.95
Lower NTSC-into-DTV	-4 7.73
Upper NTSC-into-DTV	-48.71
Lower DTV-into-DTV	-41.98
Upper DTV-into-DTV	-43.17
Taboo D/U Ratio, DTV-into-NTSC	
N-2	-23.73
N+2	-27.93
.N-3	-29.73
N+3	-34.13
N-4	-34.00 *
N+4	-24.96
N-7	-35.00 *
N+7	-43.00 *
N-8	-31.62
N+8	-43.22
N+14	-33.38
N+15	-30.58
Taboo D/U Ratio, NTSC-into-DTV	
N-2	-62.45
N+2	-59.86

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N-3	< -61.79
N+3	< -62.49
N-4	-58.00 *
Taboo D/U Ratio, NTSC-in	nto-DTV (continued)
N+4	-58.00 *
N-7	-58,00 *
N+7	-58.00 *
N-8	-58.00 *
N+8	-58.00 *
N+14	-58.00 *
N+15	-58.00 *
Taboo D/U Ratio, DTV-into	o-DTV
N-2	-60.52
N+2	-59.13
N-3	< -60.61
N+3	< -61.53
N-4	-58.00 *
N+4	-62.00 *
N-7	-63.00 *
N+7	-63.00 *
N-8	-63.00 *
N+8	-63.00 *
N+14	-63.00 *
N+15	-63.00 *

III. Noise-Limited Service

Based on the above planning factors and the C/N performance of the ATSC DTV System, the noise-limited field strength levels for DTV service are:

Low VHF Channels (channels 2-6)-	37 dBuV/m
High VHF Channels (channels 7-13)-	44 dBuV/m
UHF Channels (channels 14-69)-	50 dBuV/m